



48

48

POWER AMPLIFIER TETRODE

Heater	Coated Unipotential Cathode	
Voltage	30	d-c volts
Current	0.4	amp.
Maximum Overall Length		5-3/8"
Maximum Diameter		2-1/16"
Bulb		ST-16
Base		Medium 6-Pin
Pin 1 - Heater		Pin 4 - Grid
Pin 2 - Plate		Pin 5 - Cathode
Pin 3 - Screen		Pin 6 - Heater
Mounting Position		Vertical, Base Down

SINGLE-TUBE AMPLIFIER - Class A₁**Operating Conditions and Characteristics:**

	<u>Tetrode Connection</u>		<u>Triode Connection**</u>		
Heater [□]	30	30	30	30	volts
Plate	96	125 max.	80	125 max.	volts
Screen	96	100 max.	**	**	volts
Grid †	-19	-20*	-20	-32.5	volts
Cathode Resistor	310	310	650	625	ohms
Amp. Fact. }	Subject to considerable variation		2.5	2.5	
Plate Res. }			760	675	ohms
Transcond.	3800	3900	3300	3700	μmhos
Plate Cur.	52	56	31	52	ma.
Screen Cur.	9	9.5	-	-	ma.
Load Res.	1500	1500	-	-	ohms
Power Output [°]	2	2.5	-	-	watts

[°] 9% total harmonic distortion.

† The d-c resistance in the grid circuit should not exceed 10000 ohms.

** Screen tied to plate. Operation of the 48 as a single triode is recommended only in applications where a large plate-current change for a small grid-voltage change is essential, and where distortion is not a factor. Under such conditions, the recommended maximum plate dissipation is 8 watts.

PUSH-PULL AMPLIFIER - Class A₁*Unless otherwise specified, values are for 2 tubes*

Operating Conditions:	<u>As Tetrodes</u>	<u>As Triodes**</u>	
Heater [□]	30	30	volts
Plate	125 max.	125 max.	volts
Screen	100 max.	**	volts
Grid	-20*	-32.5*	volts
Cathode Resistor	155	325	ohms
Zero-Sig. Plate Cur.	100	100	ma.
Load Res. (plate to plate)	3000	1250	ohms
Total Harmonic Distortion	9	2	%
Power Output	5	3	watts

* Bias from auxiliary C-battery.

[□] In circuits where the cathode is not directly connected to the heater the potential difference between heater and cathode should be limited to 90 volts.

◇ Horizontal operation permitted if pins No. 2 and No. 5 are in vertical plane.

← Indicates a change.

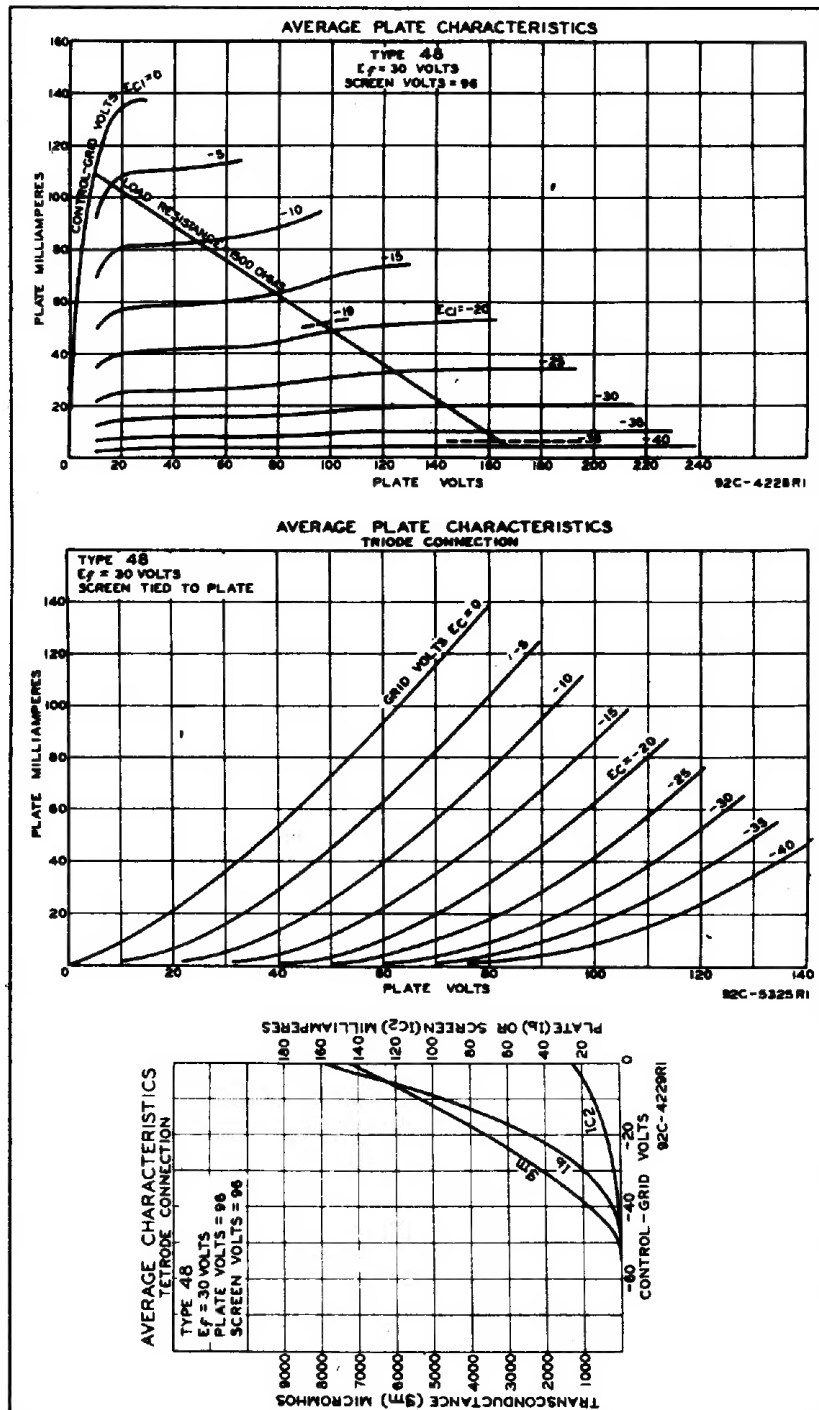
APRIL 20, 1938

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DATA



CHARACTERISTICS CURVES



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